

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

Claim 1 (currently amended): A zinc-free glass frit ~~comprising~~ consisting essentially of, by weight, from about 50% to about 70% SiO<sub>2</sub>, from about 5% to about 20% CaO, from about 3% to about 15% Al<sub>2</sub>O<sub>3</sub>, ~~up to about 20%~~ BaO, provided that the content of BaO does not exceed about 20%, up to about 15% B<sub>2</sub>O<sub>3</sub>, up to about 10% K<sub>2</sub>O, up to about 6% Na<sub>2</sub>O, up to about 10% ZrO<sub>2</sub>, up to about 5% MgO and up to about 5% PbO.

Claim 2 (currently amended): The zinc-free glass frit according to claim 1 comprising, by weight, from about 52.0% 52% to about 64% SiO<sub>2</sub>, from about 8% to about 15% CaO, from about 4% to about 11% Al<sub>2</sub>O<sub>3</sub>, from about 7% to about 15% BaO, up to about 13% B<sub>2</sub>O<sub>3</sub>, from about 2% to about 8% K<sub>2</sub>O, up to about 4% Na<sub>2</sub>O, up to about 8% ZrO<sub>2</sub> and up to about 3% MgO.

Claim 3 (original): The zinc-free glass frit according to claim 1 comprising, by weight, from about 53% to about 61% SiO<sub>2</sub>, from about 10% to about 12% CaO, from about 5.5% to about 9% Al<sub>2</sub>O<sub>3</sub>, from about 8% to about 12% BaO, up to about 12% B<sub>2</sub>O<sub>3</sub>, from about 3.5% to about 6% K<sub>2</sub>O, up to about 2% Na<sub>2</sub>O, up to about 8% ZrO<sub>2</sub> and up to about 2% MgO.

Claim 4 (currently amended): A glaze composition for forming a glossy protective surface on ceramic architectural tile, the glaze composition comprising a zinc-free glass frit, the zinc-free glass frit comprising, by weight, from about 50% to about 70% SiO<sub>2</sub>, from about 5% to about 20% CaO, from about 3% to about 15% Al<sub>2</sub>O<sub>3</sub>, ~~up to about 20%~~ BaO, provided that the content of BaO does not exceed about 20%, up to about 15%

$B_2O_3$ , up to about 10%  $K_2O$ , up to about 6%  $Na_2O$ , up to about 10%  $ZrO_2$ , up to about 5%  $MgO$  and up to about 5%  $PbO$ .

Claim 5 (original): The glaze composition according to claim 4 wherein the zinc-free glass frit comprises, by weight, from about 52% to about 64%  $SiO_2$ , from about 8% to about 15%  $CaO$ , from about 4% to about 11%  $Al_2O_3$ , from about 7% to about 15%  $BaO$ , up to about 13%  $B_2O_3$ , from about 2% to about 8%  $K_2O$ , up to about 4%  $Na_2O$ , up to about 8%  $ZrO_2$  and up to about 3%  $MgO$ .

Claim 6 (original): The glaze composition according to claim 4 wherein the zinc-free glass frit comprises, by weight, from about 53% to about 61%  $SiO_2$ , from about 10% to about 12%  $CaO$ , from about 5.5% to about 9%  $Al_2O_3$ , from about 8% to about 12%  $BaO$ , up to about 12%  $B_2O_3$ , from about 3.5% to about 6%  $K_2O$ , up to about 2%  $Na_2O$ , up to about 8%  $ZrO_2$  and up to about 2%  $MgO$ .

Claim 7 (currently amended): A method of forming a protective glaze surface on an architectural tile comprising:

providing a ceramic body;  
applying a glaze composition to the ceramic body, the glaze composition comprising a zinc-free glass frit comprising consisting essentially of, by weight, from about 50% to about 70%  $SiO_2$ , from about 5% to about 20%  $CaO$ , from about 3% to about 15%  $Al_2O_3$ , ~~up to about 20%  $BaO$ , provided that the content of  $BaO$  does not exceed about 20%~~, up to about 15%  $B_2O_3$ , up to about 10%  $K_2O$ , up to about 6%  $Na_2O$ , up to about 10%  $ZrO_2$ , up to about 5%  $MgO$  and up to about 5%  $PbO$ ; and  
firing the ceramic body to fuse the glaze composition to a surface thereof.

Claim 8 (original): The method according to claim 7 wherein the applied glaze composition and ceramic body are co-fired during a single fast firing cycle at a temperature of from about 1080°C to about 1180°C.

Claim 9 (original): The method according to claim 7 wherein the glaze composition is applied to the ceramic body after the ceramic body has been once-fired, and wherein the applied glaze composition and the once-fired ceramic body are co-fired during a second firing in a double fast firing cycle at a temperature of from about 1000°C to about 1150°C.

Claim 10 (currently amended): The method according to claim 7 wherein the glaze composition and the ceramic body are co-fired in a ~~gres porcellanato~~ single ceramic firing cycle at a temperature of from about 1160°C to about 1250°C.

Claim 11 (currently amended): A method of forming a protective glaze surface on an architectural tile comprising:

providing a ceramic body;  
applying a glaze composition to the ceramic body, the glaze composition  
comprising a zinc-free glass frit comprising, The method according to claim  
7 wherein the zinc free glass frit comprises BaO;  
applying an ink composition comprising Cr<sup>+3</sup> ions is applied to the applied glaze  
composition prior to firing; and  
firing the ceramic body to fuse the glaze composition to a surface thereof[.]],  
wherein a yellow coloration develops in the protective glaze surface where the  
ink was applied and fired.

Claim 12 (currently amended): The method according to claim 7 wherein:  
the zinc-free glass frit comprises BaO;  
~~a conventional~~ an ink composition for decorating ceramic products is applied to  
the applied glaze composition prior to firing; and  
a coloration develops in the protective glaze surface.